

INSPECTION REPORT

I GENERAL INFORMATION

FILE COPY

Company Name: Lawrence Livermore National Laboratory

Facility Address: 7000 East Avenue
Livermore, California 94550

Telephone Number: (925) 423- 4760

EPA ID Number: CA2 890 012 584

Facility Type: Storage and Treatment Facility

Regulated Units: Permitted Units-Area 612, Storage and Treatment, Building 695, Storage and Treatment (under construction), Building 693, Container Storage; Interim Status Area 514, Storage and Treatment, Building 233, Container Storage (inactive undergoing closure); Tiered Permitting-Resin Mixing Unit.

Waste Streams: Nearly all hazardous wastes, mixed wastes (RCRA hazardous with radioactive components); combined wastes (Non-RCRA hazardous waste with radioactive components)

Regulatory Status: Permitted and Interim Status Facility; Permit effective November 19, 1999 ; Registered Hauler, Reg. No. 1351, Expires November 30, 2002.

Inspected by: Luz Castillo; Essam Eissa

Dates of Inspection: May 22- 24 and May 30, 2002

Type of Inspection: CEI ☒ CME ☐ O&M ☐ Focused ☐ Limited ☐

Facility Rep. Kathy Pandrea-Raine; Vicky Salvo; Stephanie Goodwin; Suzi Jackson (5/22/02)

Type of Business: Research and Development Laboratory on: nuclear weapons, magnetic fusion, energy, lasers, biomedical and environmental sciences, and applied technology, and other nuclear applications research laboratory.

II. CONSENT

Consent to conduct inspection that involves: taking photographs, reviewing and copying records, questioning personnel and inspecting hazardous waste handling areas.

Consent given by (name and title): Suzi Jackson, Division Leader, Operations and Regulatory Affairs Group

III. DOCUMENTS REVIEWED

a. Manifests, Bills of Lading, LDR's and Exception Reports:

Manifests and land disposal notifications were reviewed at random from files dated June 2001 to the present. Manifests as a generator and as a receiving facility were both reviewed. No violations were noted.

b. Contingency Plan:

A Class 1 modification request dated April 19, 2002 that includes a revision to the Contingency Plan for HWM facilities: Area 612; Area 514; Building 233 CSU, and Building 693, was sent to the DTSC's Standardized Permits and Corrective Action Branch. No violation was noted.

c. Training Plan and Records:

Training records from 2000 to the time of the inspection (June 6, 2002) for David Sanders; Roy Elam; Chris Rasmussen; and Doug Villela were requested and provided. Additional training record information requested were provided via e-mail on July 25, 2002 (**See Attachment M**).

A review of the training records showed the following (See Attachment M).

1. David Sanders, Roy Elam and Chris Rasmussen were up to date on their training.
2. Doug Villela was due for refresher for "EP5120-010, Waste Management Unit Inspection, Procedures, and Emergency Response, Building 612 Drum/Container Crushing Unit" in April 2002. Mr. Villela last took the training for this course on April 3, 2000 Based on the training plan EP5120-010 is to be taken every 24 months (**See Attachment K**). **See Violations Section, Violation 4.**

d. Incident Report:

No incident occurred that required the implementation of LLNL's Contingency Plan.

e. Waste Analysis Plan and Records:

See Attachment K

Analysis of the following containers were requested and reviewed.

1. Container Q00060399/W137559, located at Building 693-1008, TSDF date- 2/8/01

The Waste Disposal Requisition (WDR) described the waste as trimsol-10%/ water-90 %, containing petroleum hydrocarbons and polymerized chlorinated alkenes. Samples were collected on 3/14/01 for analysis of radioactive components. The drum was placed on "hold" status while awaiting analysis.

On March 29, 2001, the sample result showed no radioactive components. On April 12, 2001, the container was released from "hold" status.

On March 25, 2002, a year after releasing the "hold" on the container, a HWM change request re-classifying the waste from a low-level waste with California (CA) hazardous waste constituent to a CA hazardous waste only, was made on the WDR.

Container Q00060399/W137559, a California hazardous waste (waste code 134), was stored in the storage area (Building 693-1008) for greater than 1 year (February 8, 2001- May 29, 2002), in violation of LLNL's Hazardous Waste Facility Permit.

See Violation 2.a. of the Summary of Violations (SOV, Attachment C) issued on June 6, 2002 and Violations Section of this report..

2. Container Q00060291/W209860, located at Building 693-1008, TSDF date- 3/15/01

The WDR described the waste as mop water with stripper from RMMA area. A sample was collected on March 26, 2001 for analysis of radioactive components. A review of the radiochemical data on April 17, 2001 showed that the waste did not contain any radioactivity.

On May 3, 2002, a year after the waste data was reviewed, container Q00060291/W209860 was released from the "hold" status. A HWM change classifying the waste from a low-level waste with California (CA) hazardous waste constituents to a CA hazardous waste only, was made on the WDR.

Container Q00060291/W209860, waste code 134, was stored in the storage area (Building 693-

1008) for greater than 1 year (March 15, 2001- May 29, 2002), in violation of LLNL's Hazardous Waste Facility Permit.

See Violation 2.b. of the Summary of Violations (SOV, Attachment C) issued on June 6, 2002 and Violations Section of this report..

f. Operation Log:

Wastes received in the Permitted and Interim Status Storage Areas are tracked in LLNL's database. Information on a container was obtained using the container number and/or WDR number . The container contents report consists of the following: date the waste was received (TSDf date), amount /type of waste and the date received ; location, waste code, and manifest number if waste had been shipped out.

During the walk-through, containers in the Permitted and Interim/Status areas were noted at random. During the records review, the waste information on the container label as observed during the walk-through was compared to the container contents information entered in LLNL's database (See Attachment F). In addition, mixed wastes with TSDf dates greater than 1 year noted during the walk-through were checked to determine compliance with the Federal Facilities Compliance Act (FFCA) requirement, the preparation of a Site Treatment Plan. The Site Treatment Plan (STP) is intended to bring LLNL back into compliance with LDR storage prohibitions under the Hazardous Waste Control Act and the Resource Conservation and Recovery Act. LLNL is authorized to store mixed waste which has been incorporated into the STP in the permitted storage units up to a maximum of one calendar year from the date of DOE's notice of termination of a covered waste to DTSC. See Attachment P, HWFP , Part IV.10. No violation was noted from the review of documents listed in Attachment F.

TRACKING CONTAINERS FROM INCOMING AND OUTGOING MANIFESTS

LLNL identifies all containers shipped on "Item J, Additional Description" of the manifest. The containers shown below were picked from manifests reviewed. LLNL provided us the information on the containers requested, and the records showed that the destination of the outgoing shipments and incoming loads were properly tracked. The information described on the container contents report accurately described the waste type, destination or origin of the waste, date shipped or received, and location of waste received. See container information and associated manifests identified below on Attachment I.

1. Container Q60347- shipped to Safety-kleen on July 31, 2001, manifest number 99555478;
2. Container Q00060347- shipped to Heritage Environmental on February 28, 2002, manifest 99555573;
3. Container Q00053921 - shipped to Envirocare on February 21, 2001, manifest number 99555429;
4. Container Q00067583- received from LLNL Site 300 on January 10, 2002, manifest 99555539; waste was is stored in Building 693-1008;
5. Containers Q00048933 and Q00047694- received from LLNL Site 300 on February 1, 2002, manifest number 99555562. The containers were shipped to Heritage Environmental on February 28, 2002, manifest number 99555573.

CONTAINER INFORMATION REVIEW

Information on containers stored in the following areas were requested: Areas 612-5, 625-B (or 625-East); Area 514-3 (portable tanks only). The container report contained the following: TSDf acceptance date; location; description, amount and type of waste; waste code (s); and source description (if any).

Containers stored greater than one year were picked at random to verify if the waste stream was incorporated into the STP. The following were reviewed (See Attachment G for reference):

1. Outer container Q00024080, Inner R013876-001, TSDf date- 11/22/89, STP waste stream LL-W017W, Pre 3/31/99 Time Period, contaminated lab trash;

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2. Container R019739, TSDF date- 5/15/92, STP waste stream LL-W017W, Pre 3/31/95 Time Period, contaminated lab trash;
3. Container R014021, TSDF date- 9/20/91, STP waste stream LL-W017W, Pre 3/31/95 Time Period, contaminated lab trash;
4. Container R030082, TSDF date- 7/27/93, STP waste stream LL-W015, Pre 3/31/95 Time Period, vacuum cleaner filters;
5. Container R019736, TSDF date- 3/5/93, STP waste stream LL-W015, Pre 3/31/95 Time Period, metal contaminated hepa filter.

Information on the portable tanks (except for item 8 below) stored greater than one year in Area 514-3, were reviewed and the result is as follows.

1. 612B102/W105989, TSDF date- 6/27/96, STP waste stream LL-W008, Pre 3/31/95 Time Period, spent organic liquid;
2. 612B103/W105990, TSDF date- 6/27/96, STP waste stream LL-W008, Pre 3/31/95 Time Period, spent organic liquid;
3. 612G9602/W144817, TSDF date- 6/27/96. This waste stream was not listed on the STP. According to Mr. Rod Hollister, the contents of the portable tank was bulked to the Area 514 tank farm on September 25, 2000; the waste was treated and the tank was rinsed and re-used for other waste. See Blend 01-003 and Treatment Batch 01-05, with a treatment date that started in December 2000. Wastewater generated from the treatment was discharged to the sewer on 2/1/01. See Attachment H.
4. 612B101/W123208, TSDF date-11/8/96, STP waste stream LL-W008, Pre 3/31/95 Time Period, spent rinsate from Area 514 chlorosolvent operation.
5. 612B104/W10805, TSDF date- 6/27/96, STP waste stream LL-W008, Pre 3/31/95 Time Period, spent organic liquid chlorosolvent mixture;
6. 612B104/R021434, TSDF date- 11/1/94. This waste stream was not listed on the STP. According to Mr. Hollister their database (TWMS) showed that the container was bulked to 514R5A5 and then sent to sewer. See Attachment H. Portable tank 612B104 currently stores spent organic liquid chlorosolvent; see 5.a. above.
7. 612H117/W127137, TSDF date- 12/16/99, STP waste stream LL-W008, Pre 3/31/95 Time Period, spent organic liquid bulked ignitable liquids.
8. Container R000509, TSDF date- 1/5/98, STP waste stream LL-W022, Pre 3/31/95 Time Period, spent inorganic solid HWM, mixed chips & coolant.

No problem was noted from the review of the above containers/portable tanks.

STORAGE IN TANKS/CONTAINERS CAPACITIES

A record of the volume of wastes stored in each permitted and interim status storage area was requested.

Based on the review of records provided during the inspection, the total volume of regulated and non-regulated waste materials in each unit did not exceed the storage capacities allowed. Furthermore, the cumulative volume of regulated waste stored in all units which was 493,084 gallons, did not exceed 808,000 gallons specified in the permit. **See Attachment E.**

TREATMENT RECORDS

Area 514/ Process and Treatment Log from February 27, 2002 to May 8, 2002.

The treatment record information includes: WDR (Waste Disposal Requisition) number, the amount of wastes processed, how and where it was processed, wastes generated from the treatment, and finally wastewater discharged to the sewer.

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Rinsate was generated from triple rinsing of three portable containers (1) 660 gallon portable tanks and (2) 330 gallons and (120) containers of 55-gallons and smaller. The rinsate, a mixed waste was bulked to the tank farm, treated/blended (Blend 02-08) and processed through the vacuum filtration unit. It was then transferred to tank RA5A7 for final treatment through the cold vapor evaporator (side A), to portable tanks. From the portable tanks, the wastewater was sent to tank R5A9; the wastewater was adjusted for pH then discharged to the sewer. See Attachment L.

Wastes generated from the process consisted of three (3) hazardous waste filter cake drums, two (2) wax drums from the blend tanks, and four (4) concentrated waste drums from the reaction chamber cleanouts. See Attachment L.

Building 513/ Stabilization Treatment Record

The treatment record showed the old container number and WDR of the waste before treatment, and the new container and WDR for the treated waste. The stabilization process operator record described the stabilization agent and amount used on the waste, the treatment date, and the operators that processed the waste. No problem was noted. See Attachment O.

Building 612 Container Crushing Unit

The drum crushing log included the following information: WDR of the containers crushed; bin number where the crushed containers were placed; and the manifest that accompanied the shipment of the hazardous waste crushed drums. No problem was noted. See Attachment L.

g. Inspection Records:

Daily and Weekly inspection records for the month of February 2002 was chosen for review for the following areas: 514, 612, 419 (under closure), and 233.

Daily inspection records of units "when-in-use", specifically the carbon adsorption, the cold vapor evaporator and the drum/container crushing unit were also requested and reviewed. No problem was noted.

h. Tiered Permitting Applications and Authorization Letters:

Not reviewed.

Annual/Biennial Reports:

The report submitted/signed on April 10, 2002. This document was not reviewed.

SB 14 Plans:

Not reviewed.

k. Closure Cost Estimates and Updates:

Not Applicable.

Part A:

Reviewed as part of the inspection preparation.

m. Part B:

Reviewed as part of the inspection preparation.

n. POTW Compliance Data:

Not reviewed.

o. Tank and/or Containment Certifications:

Not reviewed.

p. Hauler Registration:

LLNL's Hauler Registration expires on November 30, 2002. A list of vehicles used for hazardous waste transportation was requested. In reviewing the list, I noted a "trailer flatbed, 30 ft." that was "past due" for an annual Department of Transportation (DOT) inspection; the trailer did not have a notation that would indicate its status. The other vehicles on the list had a status description as "onsite use only- no annual DOT inspection" or "current on DOT requirements."

In response to my question to LLNL on the use of the "trailer flatbed, 30 ft.", Mr. Mohammad Abri replied via e-mail, that the trailer has not been used for transporting off-site waste for the last two years. See Attachment N.

IV. NARRATIVE OF OBSERVATIONS/DISCUSSION WITH OPERATOR

See Site Maps, Attachment A, for reference.

May 22, 2002

Upon arrival at the West Gate Badge Office, DTSC personnel Messrs. Essam Eissa, Dave Anderson, Michael Stanek and I (We) completed the necessary paperwork to obtain a badge for access to the site. We were met at the Badge Office by Mohammad Abri, Kathy Pandrea-Raine, and Vicky Salvo. We proceeded to the Environmental Protection Department Building located at T-5475.

A pre-inspection meeting was held in a Conference Room at T-5475. The meeting was attended by: LLNL personnel, and Department of Energy representatives. See Attachment J.

I began the meeting by stating the purpose of our visit as a Compliance Evaluation Inspection that involves inspection of the permitted and interim status areas, and some accumulation areas. In addition, records will be reviewed upon completion of the walk-through. I also informed them that photographs will be taken as necessary during the inspection. Ms. Jackson said, LLNL will be providing us a photographer. In response to my question on the status of buildings 280 and 695, Ms. Jackson said 280 will not be opened and building 695 was not yet in operation. I identified the areas for inspection: Areas 612, 514, 233, 693, Waste Accumulation Area 511. I informed them that Mr. Anderson, Industrial Hygienist will be providing us with industrial hygiene support, and he will be monitoring the areas to be inspected using a Ludlum 19. I informed them that the Department has a 2 millirem per hour radiation dose and that staff could not proceed with the inspection in an immediate area if the dose is exceeded. I asked Ms. Jackson if she would grant us consent to do the inspection as I had described. Ms. Jackson granted us consent.

After the pre-inspection meeting, DTSC personnel accompanied by Ms. Pandrea-Raine and Ms. Salvo proceeded to Area 612.

AREA 612 Container Storage and Treatment Group (See Attachment A, Figure 2)

Upon arrival at Hazardous Waste Management (HWM), Area 612, we were met by Ms. Kerry Cadwell. Ms. Cadwell briefed us on HWM Rules to follow while we were at Area 612. Mr. Michael Hayes who was present during the briefing and Ms. Kerry, accompanied us during the walk-through.

Area 612-4 Receiving, Segregation and Container Storage Unit

This area is a Consolidated Waste Accumulation Area (CWAA), divided into five cells -Acids, Poisons, Caustics, and two Flammable Bays. CWAA 612-4 was an Interim Status area that reverted to generator status on December 4, 1999, 15 days from the effective date of the permit. See Attachment P, HWFP, Part IV.2.

I observed a lab pack container, Q00071323, with a workplace end date of 2/21/02, labeled toxic, containing organic liquid. The hazardous waste container had been in the WAA exactly 90 days; I pointed this out to LLNL personnel. The container was moved to Building 693-1008 on the same day. See Container Report, Attachment D.

Another container, Q00067475, labeled with workplace end date- 12/01/01, toxic, waste code 352, was observed being stored greater than 90 days. **See Summary of Violations, and Violations Section, Violation 1.** This was pointed out to Ms. Cadwell and Mr. Hayes. On May 29, 2002, the drum was transferred to Building 625-C, a permitted storage area. See Attachment D.

Lab Packing/Packaging Area

This area also reverted from interim status to generator status on December 4, 1999. Containers received were being segregated by waste type and hazardous characteristics. Mr. Earl Thomas explained how wastes were being handled and tracked when received. A copy of a tracking document for the a lab pack container was reviewed. No problem was noted.

We then proceeded to the storage units in Area 612 starting at Area 612-5

Permitted Storage And Treatment Areas

Area 612-5 Container Storage Unit

Area 612-5 consists of a tent area, a caged area, and an open area, west of the tent. The drums west of the tent contained solid hazardous wastes (See Attachment B, Photo. Nos. 3 and 4). I observed a few drums that were warped, but upon checking, the containers were empty. See Attachment B, Photo. No. 5. According to LLNL personnel, the labels on the empty drums were being kept since the waste will be crushed and shipped out as hazardous waste. Inventory on the drums stored in this area was requested and reviewed and no problem was noted.

The tent area in Area 612-5 was viewed from outside due to a high radiation reading of at least 2 millirem per hour radiation dose. A record of all containers stored inside the tent area was requested and reviewed. No problem was noted.

The caged area, also referred to as the Classified Storage Area, consisted of 4 transportainers, 612-5TR1- TR4. A record of the containers stored in the transportainers were requested and reviewed. Details on the records review is on Item III.f of this inspection report.

Building 614 Container Storage Unit

Building 614 consists of the west and the east cells with four storage units each. This is the only storage area where the used capacity for the storage units is determined by the actual amount of waste held by the containers, provided a current inventory of the containers and the amount of wastes stored in the containers are maintained for each cell in each storage unit. For the other storage units, used capacity is based on the maximum capacity of each container stored in the units. See Attachment P, HWFP, Part IV.9. (c). An inventory was posted outside each storage cell. A copy of the inventory from each cell was requested and reviewed. No problem was noted.

Building 612 Container Storage Unit

This building houses the Size Reduction and the Drum/Container Crushing Units and a Container Storage Area. The size reduction unit has never been used. The Drum/Container Crushing Unit is currently used; A copy of the crushing unit log was requested for review. See Item III. f. of this report for details on the review.

The Container Storage Area was inspected, and the drums appeared to be well maintained and aisle space was adequate. No problem was noted.

Area 612 Portable Tank Storage Unit

In this storage unit, I observed 9 portable tanks and 7 totes. All containers were properly labeled, and adequate aisle space was maintained. No problem was noted.

Area 612-1 Container Storage Unit

This area consists of tents A and B, an open area, and 3 transportainers. Between tents A and B, I observed containers containing only radioactive wastes. Containers in tent A were inspected and the containers appeared to be in good condition and adequate aisle space was being maintained. Tent B was viewed from outside due to a high reading of ≥ 2 millirem/hour. The containers appeared to be stored properly.

North of tent B, were 3 transportainers (See Attachment B, Photo. No. 1). The transportainer (brown) closest to tent B was not labeled. According to Mr. Richard Michalik, the transportainer was being used as a storage area, so it was not labeled but each container inside had their individual label. According

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to LLNL, the required aisle space was being maintained inside the transportainer (See Attachment B, Photo. No. 2).

The middle transportainer (blue) was labeled Q00070557, storage date- 9/29/88 (See Attachment B, Photo. No. 1). According to Mr. Michalik, the transportainer was being managed as an outer container, like a lab pack. An inventory of wastes stored inside the transportainer Q00070557 was requested for review. See Attachment F. No violation was noted.

The third transportainer was empty.

Area 612-2 Container Storage Unit

The drums in this area were all in good condition and adequate aisle space was being maintained. The eyewash was checked and was found to be operating properly.

Area 612 Tank Trailer Storage Unit- this area was empty .

Building 625 Container Storage Unit

This building is divided into two areas, Areas 625 east and 625 west. PCB wastes and mixed wastes were observed in Area 625 west. Area 625 east was viewed from the outside due to high radiation reading, ≥ 3 millirem/hour. Most of the wastes stored in Area 615 east are TRU (transuranic) wastes. The drums appeared to be in good condition, and adequate aisle space was observed.

After visiting Area 612, we returned to T-5475, and discussed our findings with LLNL as described. See list of attendees on Attachment J.

I informed them of the two containers found in Area 612-4 ; one container was on its 90th day, and one had been stored over 90 days. Pertaining to the three transportainers observed in Area 612-1, I asked LLNL's authority to use them. Ms. Karen Doiron pointed out the area in the Operation Plan. According to Ms. Doiron, the use of the transportainers is discussed in Volume 1, Part IV.1.1. and Table 8, container Types and Specifications (>119-gallon capacity wood or steel boxes) of the Operation Plan, See Attachment P .

After the meeting, Mr. Eissa and I identified to Ms. Pandrea-Raine and Ms. Salvo the areas that we will be inspecting the next day.

May 23, 2002

Mr. Eissa, Mr. Anderson and I proceeded to T-5475 and met with Ms. Pandrea-Raine and Mr. Terusaki. Ms. Stephanie Goodwin gave us consent to continue the inspection.

Before we proceeded with the inspection, I requested the following information for specific containers: waste description including quantity, waste codes, hazardous and physical characteristics; storage dates; location, and Site Treatment Plan (STP) waste stream designation, if applicable. I also requested a detailed inventory of the wastes stored in Area 625-east, inside trailer Q00070557, and inside the classified storage area. See Item III of this report for details on the review of these documents.

We then proceeded to Area 514 Complex.

Area 514 Complex (under Interim Status, See Attachment A, Figure 3)

The inspection group consisted of LLNL personnel (Stan Terusaki, Kathy Pandrea-Raine, Richard Michalik), Department of Energy representative, Mr. Wen Kao, and DTSC personnel (Luz Castillo, Essam Eissa, Dave Anderson).

Upon arrival at Area 514, we were met by Mr. Scott Kidd. Mr. Kidd explained the treatment processes: from the wastewater treatment tanks, the vacuum filtration unit, cold evaporator units, the quadruple tanks, and finally the discharge of the waste water to the sewer. There was no treatment being conducted at the time of the inspection. A copy of the last treatment record was requested for review. See Attachment L). For details on the review, see Item III of this report. We continued on to Area 514-2, Building 513, and Area 514-3.

Area 514-2 Container Storage Unit- the drums in this area were properly stored, labeled and in good condition. No violation was noted.

Area 513 container Storage Unit and Solidification Unit

No problem was noted in the storage unit. The solidification unit was not in operation. The last treatment of mixed waste using the solidification unit was in September 2001 according to Mr. Kidd. A copy of the stabilization record was requested (See Attachment O). See Item III for details of the review.

Area 514-3 Container Storage Unit

This area had hazardous, radioactive, and mixed wastes stored in containers and in portable tanks. The drums were properly stored, labeled and adequate aisle space was observed. However, in the area where the portable tanks were stored, access to the tanks was limited due to lack of aisle space. The arrangement of the portable tanks and support obstructed our movement as we inspected the tanks. See Attachment B, Photo Nos. 6-10. **See SOV (Attachment C) and Violations Section, Violation 3.**

After Area 514, we continued on to Building 693.

Building 693 Container Storage Units (See Attachment A, Figure 4)

Building 693 is divided into four cells: 1000; 1004; 1008; 1012. The eyewash/shower in each cell was inspected and they were in good operating condition. The drums in the cells appeared to be in good condition, and adequate aisle space was being maintained.

In cell 1008, Mr. Eissa and I observed two hazardous waste drums that had been stored greater than one year. The two drums were labeled: Q00060291, TSDF date- 3/15/01, spent inorganic mop water and Q00060399, TSDF Date- 2/8/01, spent inorganic liquid, trimsol 10 %. **See SOV (Attachment C) and Violations Section, Violation 2.**

Ms. Caldwell explained that the drums had been re-classified from low level California waste to hazardous waste. I requested a copy of the analysis and container report for the two drums: See Item III.e. Waste Analysis and Records of this report, and Attachment K.

WAA 511

Mr. Joe Stonich met us upon arrival. The drums in the area were properly maintained, labeled, and in good condition. No problem was noted.

Building 233 (See Attachment A, Figure 1)

This area did not contain any hazardous or mixed waste drum.

After completing the walk-through, Ms. Pandrea-Raine, Ms. Salvo, Mr. Eissa and I proceeded to T-5475. I identified to Ms. Pandrea-Raine and Ms. Salvo the documents needed for records review. See Item III of this report for details.

May 24 and 30, 2002

Mr. Eissa and I were granted consent to continue the records review portion of the inspection by Ms. Stephanie Goodwin and Ms. Kathy Pandrea-Raine on May 24 and 30, respectively.

Documents requested for review included but not limited to the following: container inventories; manifests; inspection logs; treatment records; waste analysis records; Site Treatment Plant list of waste streams; and training records. See Item III of this report for details.

I. VIOLATIONS

Summary of Violations (SOV) attached? Yes, See Attachment C.

The following violations were cited in the SOV issued to LLNL on June 6, 2002. LLNL submitted a response to the SOV on July 12, 2002. DTSC's response is shown under the Compliance Action item after each violation.

Storage of Hazardous Wastes in an Unpermitted Area Class I Violation

LLNL violated Health and Safety Code, section 25202 (a), California Code of Regulations, title 22, section 66270.30 (a) and Hazardous Waste Facility (HWFP), Parts III.2. (b), and IV.2 in that, on or about May 22, 2002, a 55-gallon container of mixed waste, Q00067475, containing spent organic lab trash, with a workplace end date of December 1, 2001, was being stored in Area 612-4, an unpermitted storage area.

Area 612-4 Receiving, Segregation, and Container Storage Unit was converted to a 90-day generator accumulation unit on December 4, 1999.

Evidence: Attachment D, Container Contents Report for Q00067475.
Witnesses: Luz Castillo; Essam Eissa

Compliance Action

No further action is required regarding the above violation. Based on the Container Contents Report provided to DTSC representatives on June 4, 2002, the above drum was transferred to Building 625 Container Storage Unit, a permitted storage area, on May 29, 2002.

Storage of Hazardous Wastes Greater than One Year Class I Violation

2. LLNL violated Health and Safety Code, section 25202 (a), California Code of Regulations, title 22, section 66270.30 (a) and Hazardous Waste Facility (HWFP), Parts III.2. (b), and IV. 10.(a) in that, on or about May 23, 2002, two containers of hazardous wastes were being stored for greater than one year in Building 693-1008, Container Storage Unit, to wit:

- a. Container Q00060399, a 55-gallon drum containing spent inorganic liquid, trimsol 10%, labeled with a permitted storage unit (TSDF) acceptance date of February 8, 2001;
- b. Container Q00060291, a 55-gallon drum containing spent inorganic liquid mop water, labeled with a TSDF acceptance date of March 15, 2001.

LLNL is authorized to store hazardous waste in the permitted storage units up to a maximum of one year from the date of first acceptance at any of the hazardous waste management units.

Evidence: Attachment K, Container Contents Report - Q00060399 and Q00060291
Witnesses: Luz Castillo; Essam Eissa

Compliance Action

No further action is required for the above violation. The above hazardous waste containers were shipped to Safety-Kleen, San Jose on May 28, 2002. See Attachment K.

Failure to Maintain Adequate Aisle Space, Area 514-3 Class II Violation

3. LLNL violated California Code of Regulations, title 22, section 66265.35 in that, on or about May 23, 2002, LLNL failed to maintain aisle space between the portable tanks containing mixed wastes, in Area 514-3 Container Storage Unit, to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment in an emergency.

Evidence: Attachment B, Photo Nos.
Witnesses: Luz Castillo; Essam Eissa

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Compliance Action

The above violation remains. LLNL's correspondence to DTSC dated July 12, 2002 stated that a minimum of 3 feet aisle space was being maintained between the portable tanks in Area 514-3. However, the stated 3 feet aisle space was not observed during the inspection. The bottom support for the tanks obstructed our movement while we conducted the inspection. See Attachment B, Photo Nos. 6-10.

Effective immediately, LLNL shall submit to DTSC photograph(s) demonstrating that adequate aisle space is now being maintained in Area 514-3 where the portable tanks are stored.

The following violation was found subsequent to the inspection and was not listed in the Summary of Violation issued to LLNL on June 6, 2002

Failure to Provide a Review of Initial Training As Required Minor Violation

4. LLNL violated California Code of Regulations, title 22, section 66264. 16 (c) in that, on or about May 23, 2002, LLNL failed to ensure that HWM personnel, Mr. Doug Villela, has taken the required refresher training, for course "EP5120-010, Waste Management Unit Inspection, Procedures, and Emergency Response for Building Drum/Container Crushing Unit". Mr. Villela last took the training in April 2000 and he was due for EP5120 refresher in April 2002.

Evidence: Attachment M; Training Records Summary; Item III.c. of this Report.
Witnesses: Luz Castillo; Essam Eissa

Compliance Action

Within 30 days of receipt of this report, LLNL shall submit to DTSC documentation showing that the refresher training for "EP5120-010" has been taken by Mr. Villela.

VI. CONCLUSIONS

June 6, 2002

A list of attendees during the meeting is on Attachment J.

I started the discussion by thanking everyone who attended the meeting. After a brief introduction of everyone present, I identified the areas visited during the inspection: all permitted and interim status areas, and Consolidated WAA 612-4, Lab packing Area, and WAA 511). I stated that I have prepared a Summary of Violations (SOV, Attachment C) addressing the violations found during the walk-through portion of the inspection. I mentioned that the record review portion of the inspection has not been completed and that our findings from the review will be addressed in the inspection report that will be mailed to LLNL.

I discussed the violations in the SOV and the corresponding compliance action for each violation.

Area 612-4 Receiving, Segregation and Container Storage Unit

A drum, Q00067475, that had been stored in an unpermitted storage area for over 90 days had been moved to a permitted area based on a Container Contents Report provided. A lab pack drum, Q00071323 that had been in the same area on its 90th day had also been moved to a permitted area.

Building 693 Container Storage Unit

Two drums, Q00060399 and Q00060291, were observed being stored for greater one year, a violation of LLNL's permit. I asked them to ship the waste off-site and provide me a copy of the manifest used to accompany the wastes within 15 days of receipt.

According to LLNL, the staff who was supposed to forward the analysis information to HWM left, so the determination was not made until a year later. LLNL agreed that the problem could have been avoided.

Area 514-3 Container Storage Unit

In Area 514-3, the treatment and storage areas were toured. We observed that the area where the portable tanks were stored had inadequate aisle space. I described how the tanks were arranged and explained that if there was a leak in one of the tanks, it would be difficult to get to the tank to fix a leak or remove the contents for transfer into a drum due to lack of adequate aisle space.

After the SOV discussion, I discussed the transportainers observed in Area 612-1. I mentioned that in a previous discussion, LLNL had indicated the use of transportainer in the Operation Plan; I stated that I checked the Operation Plan and the use of transportainers was not clear. I recommended that LLNL discuss the transportainer issue with the Permit Writer to clarify its permit status. They agreed.

I complimented them for a well maintained facility. I also complimented Kathy Pandrea-Raine and Vicky Salvo who have been extremely cooperative in providing us the documents we needed and getting the right personnel to answer specific questions.

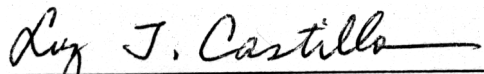
Ms. Charlene Grandfield thanked us for acknowledging the cooperation from their staff. Mr. Keith Warwick, DOE, commented that he thinks highly of HWM.

I issued the SOV (Attachment C) which was signed by Stephanie Goodwin. I informed them that a copy of the inspection report will be mailed to LLNL. Mr. Essam and I thanked them all for their cooperation during the inspection. We left the facility at 3:00 p.m.

VII. ATTACHMENTS

Attachment A -	Site Maps, 4 pages.
Attachment B-	Photographs, 10 pages.
Attachment C-	Summary of Violations, 3 pages/LLNL's Response to SOV, 3 pages.
Attachment D-	Area 612-4 Container Reports- Q0007132, 16 pages and Q00067475, 2 pages. .
Attachment E-	Container Inventories/Capacities, 17 pages.
Attachment F-	Container Info Request Log, 1 page.
Attachment G-	STP information on Classified Storage Area Containers, 15 pages.
Attachment H-	Area 514-3, Container Information, 22 pages.
Attachment I-	Information on Containers from Manifest, 37 pages.
Attachment J-	List of Attendees, 2 pages.
Attachment K-	Waste Analysis/ Wastes Stored Greater Than a Year, 46 pages.
Attachment L-	Treatment Records, 27 pages.
Attachment M-	Training Records, 35 pages.
Attachment N-	Hauler Registration/ Vehicle Information, 3 pages.
Attachment O-	Stabilization Treatment Record, 21 pages.
Attachment P-	Hazardous Waste Facility Permit, 49 pages/STP 2.7.1, 1 page/Operation Plan, Part IV & Table 8, 4 pages.

VIII. SIGNATURE



Luz J. Castillo

Senior Hazardous Substances Scientist
Statewide Compliance Division

AUG. 14, 2002
Date